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Keeping Up With Demand The Big Challenge for Egyptian Agriculture

Despite the building of the High Aswan Dam in 1970 and the consequent opening of new land to farming, Egyptian agriculture is falling behind in its ability to meet domestic food needs. As a result, agricultural imports have risen to record levels—including nearly half a billion dollars' worth of U.S. farm products last year—and the country is focusing on ways to boost its agricultural output.

As the leading agricultural importer in the developing world—and with imports recently in a sharp uptrend—Egypt is under intense pressure to increase its farm output. But, the country also faces a number of production constraints, according to H. Reiter Webb, U.S. Agricultural Attaché, Cairo, in a recent interview with *Foreign Agriculture*.

The major problems, said Webb, are a lack of arable land in a country that is over 95 percent desert, insufficient price incentives, an inefficient animal sector, and soil salinity on the extensively irrigated farmland. In addition, soaring costs are slowing the ambitious land reclamation program that Egypt is counting on to bring more land into agricultural production.

All the while, demand is growing at a relentlessly fast pace, reflecting a population growth of around 2.3 percent a year, plus increased per capita food consumption as incomes rise.

These factors, in combination, have pushed Egypt's agricultural imports from an average of only $301 million in 1970-73 to a record $1.6 billion in 1976. Nearly $500 million of the 1976 imports came from the United States to make Egypt the largest U.S. farm market in the Middle East.

Egypt encompasses some 1 million square kilometers—about the size of Arizona, California, and New Mexico combined. As in those three States, deserts are a dominant feature of the country, and, in fact, cover all but 4 percent of the land area.

But Egypt also has some of the world's most fertile land; according to Webb, the 2.7 million hectares under irrigation in the Nile Valley and Nile Delta enjoy excellent climate, abundance of water, and rich topsoils.

About 9-10 percent of this land is planted in permanent crops such as vineyards, orchards, and sugarcane. Some 25-30 percent of the remaining area is in cotton rotation, which means that cotton is planted in March, harvested in October-November, and followed either by a short crop of clover or a winter vegetable. Most of the remaining land is planted during the winter either in wheat or berseem clover, followed by summer grains. Vegetables and legumes often are included in these rotations.

Also competing for limited areas of habitable land are Egypt's 40 million people, whose numbers are growing by nearly a million a year and overflowing the cities of Cairo and Alexandria, where population density ranks among the highest in the world.

Although completion of the High Aswan Dam in 1970 relieved some of these pressures by adding new land to production, the country has not achieved the agricultural breakthroughs needed to keep pace with burgeoning demand.

One of the fundamental constraints, according to Webb, is in the agricultural policy area. For farmers not in permanent crops, the Government still determines which of the several rotations they may follow—cotton, or winter wheat/berseem clover, followed by summer grains. The fellahin (peasants) are required to plant at least one-third of their area in such mandatory crops.

Webb said that this requirement usually results in their planting even more of the mandatory crops "because once they're obligated to go to a third, it doesn't make sense to have a wide variety of products." The exception to this is around urban centers, where large quantities of land are devoted to seasonal vegetables.

"Not only are the fellahin required to plant their mandatory crop allotments, but they also must sell these crops—cotton, wheat, corn, rice, barley—to the Government at artificially low prices," Webb added. Consequently, the farmer has no price incentive to increase production of the mandatory crops, especially since he is aware that those crops "are not bringing anything close to world prices and that he is, in effect, subsidizing domestic consumption in the cities."

In contrast, fresh fruits and vegetables provide the most profit for farmers close to urban areas.

By Beverly Horsley, Associate Editor, Foreign Agriculture.

Clockwise (from top far left): Inside of an Egyptian textile plant; Egypt's cotton textile activity is expanding, and this traditionally big cotton exporter is importing less expensive U.S. staple lengths. Researchers seek ways of improving cotton varieties. An ancient Archimedes screw "tombore"—still an important water-lifting device on many Egyptian farms. A farmer plows his field with oxen—an age-old method that is gradually being replaced by mechanization in most areas.

Webb said that while there are no easy solutions to these problems, one positive move might be to create a system of price incentives that would stress maximum value of production, rather than maximum output.

With its excellent soil and climate, plus a convenient location on the Mediterranean Sea not too far from the large markets of Western Europe, Egypt could produce high-value fruit and vegetable crops for export, rather than lower value basic grains that can be purchased readily on the world market. In fact, the Egyptian Ministry of Agriculture has prepared estimates showing that a sizable increase in the value of production could be achieved by shifting out of the current crop rotation system.

Webb sees several obstacles to realization of this possibility, however.

One is Egypt's worry over national security—and particularly availability of important foodgrain—at a time of continuing unrest in the Middle East. Even now, the country must import large quantities of foodgrain, since it produces, for instance, only 2 million tons of wheat a year while importing 4-5 million tons. Moreover, domestic grain is retained largely in the rural areas, while the populous cities obtain around 90 percent of their wheat and flour needs from imports.

Then, too, Egypt lacks adequate infrastructure to take advantage of "its production potential." At the present time, the country does not have the grading system, packinghouses, quality control, refrigeration, transportation, and the basic efficiency needed to move high-quality fruits and vegetables.

Pointing up this need, the country's four major exports today—cotton, potatoes, onions, and garlic—are all relatively nonperishable, which "gets them past the infrastructure problem."

Livestock production is another area where rapid improvement could be made. "The Egyptian Ministry of Agriculture has estimated that there are 4-5 million draft animals on farms in Egypt that not only produce almost no meat or milk, but also consume the output of a third of the planted area," said Webb. These are horses and donkeys used largely for transportation and water buffalo used on the farms to turn water wheels.

The Government plans to phase out use of these inefficient animals and replace them with various forms of mechanization—small irrigation pumps, small tractors and cultivators, and trucks. However, such a change is a long way off and may be difficult to sell to farmers who consider draft animals almost as pets, as well as "insurance policies" against hard times, when the animals can be sold for money to tide the farmer over to the next season.

Also, any mechanization will have to be on a scale appropriate to a country where the average holding is less than 4 hectares.

The third major problem facing Egyptian agriculture—soil salinity—is caused by the use of too much water for irrigation. The answer to this problem, said Webb, "is either to use less water or put in tile drainage, or—best of all—both." Toward this end, there are some extensive projects underway, largely financed by the U.S. Agency for International Development, that will greatly expand the tile drainage systems in Egypt.

Currently, Webb said, there is no drainage from Cairo south to the Aswan Dam. "All the water used there for irrigation comes out of the river, and the drainage eventually comes back into the river, so there is a bit of salt added, and the water is beginning to require some good management by the time it reaches Cairo."

North of Cairo toward the Mediterranean Sea, a couple of extensive tile drainage schemes already are operating, and more are under construction.

Webb added, however, that Egypt currently has a surplus of water year round, and the surplus of water could be greatly increased if Egypt went to sprinkler and drip irrigation instead of the present reliance on gravity irrigation.

"By any set of projections that I have seen, Egypt is likely to have an excess of water well into the next century," Webb added. "So water is not a limiting factor even though we are talking about a desert country."

Much of Egypt's hope for increasing agricultural production and reducing imports, however, hinges on reclaiming land from the desert. "The problem is that when you talk about deserts in Egypt, you're talking about blowing sand," said Webb. In contrast, the dry lands of Arizona, California, and other western U.S. States often have good soils.

Consequently, land reclamation in Egypt involves much more than merely obtaining the needed water: "One must start, in effect, to build the soil, which is a long and expensive process."

Webb said that around 1970, Egypt identified roughly 380,000 hectares, largely on the east and west side of the Nile Delta, that could be irrigated by gravity. Work on some 125,000 hectares of this land was begun in 1971.

"It takes about 2 years to dig the canals and get the water to the land," Webb said. "It then takes a year or so to put in roads and clinics, houses, and schools, followed by another 2 years for flooding the land, letting it drain, and plowing it under—the latter efforts being directed toward merely creating the soil."

Subsequent plowing under of the soil gradually puts humus back into it. This means that "after 5 years, a significant investment, and no income, you're at what the Egyptians refer to as the marginal level of production."

Yields at that point are expected to be only about 20 percent of the national average. "Using good soil management, in another 5 years Egypt expects yields of about 80 percent of those now being obtained in the Nile Valley and Delta.

"The 125,000 hectares on which land reclamation was begun in 1971 is now at about the halfway point," said Webb, "which means that it is supposedly capable of starting a commercial crop." However, the country lacks the money needed to develop the land adequately and consequently is looking for foreign investors.

It also is up against a tremendous cost inflation that today means "something in the neighborhood of $4,500 a hectare to start from the blowing sand stage . . . and "you're 10 years down the road, with your money tied up another 7-9 years, before you begin to make a profit."

Because of such problems, Webb thinks Egypt will remain a large and expanding importer for some years to come. The country also is highly dependent on food aid, around 90 percent of which comes from the United States. Indeed, of the $454 million in U.S. farm exports to Egypt last year, nearly half moved under the Public Law 480 program, including large quantities of wheat and wheat flour. □

Ireland Boosts Exports Of Beef Over '76 Level

Reflecting a higher level beef production and a lower rate of stockbuilding than a year earlier, Ireland's beef exports this year are expected to rise by nearly 9 percent above the 1976 mark to about 196,000 tons.

Based on dispatch from U.S. Agricultural Attaché, Dublin.

Almost all of these shipments—which include exports of intervention beef for sale or storage abroad—are expected to go to other European Community (EC) destinations.

Ireland's rising prices for beef and lamb this year suggest that domestic consumption of these meats is unlikely to rise above 1976 levels, and may even decline marginally.

Pork prices, however, are regarded as relatively reasonable—although by no means cheap—and some slight increase in pork consumption could take place.

Irish cattle slaughter during 1977 is forecast at about 1.3 million head—marginally higher than the 1976 level. Registered cattle slaughter, which last year accounted for about three-fourths of the total, was 434,000 head during January-June 1977, 2 percent above the total of the same period of 1976.

Trade sources expect the rate of slaughter to continue a little ahead of the 1976 rate for the remainder of this year.

Within the total, prime cattle slaughter is over 7 percent above the January-June 1976 level in the first half of 1977 at 303,000 head, while cow slaughter is 8 percent lower at 131,000 head. Sheep slaughter during 1977 also is expected to be substantially below the 1976 level.

In spite of the relatively low supply of cattle this year—compared with 1975—the Irish beef market continues to rely heavily on sales to EC intervention stocks. Many factories continue to sell half—the maximum permitted by the Irish

Poultry, Egg Expansion Set In Morocco

Morocco plans substantial increases in output of poultry meat, eggs, and poultry feed over the next 5 years.

Poultry meat production, according to the Government's preliminary plan, is to rise from 50,000 metric tons per year in 1977 to 94,000 tons in 1982, and egg outturns are expected to advance from 413 million units in 1977 to 663 million in 1982.

Based on dispatch from Jerome M. Kuhl, U.S. Agricultural Atfaché, Rabat.

Feed production is scheduled to rise from 87,500 tons in 1977 to 271,000 tons in 1982. Plant capacity is to be expanded from 100,000-110,000 tons to 300,000 tons during this period.

Morocco is nearly self-sufficient in feedgrains. Sorghum imports totaled only 65,000 tons during 1976/77 (July-June), while imports of corn, barley, and oats were zero.

Feedgrain imports during the current year are expected to continue at roughly the same levels.

Consumption of poultry meat, estimated at an average 2.72 kilograms per person for 1977, is expected to increase to 4.37 kilograms in 1982, while egg consumption, estimated at an average 22.6 units per capita for 1977, is expected to rise to 30.8 by 1982.

Most of the increased output of poultry meat and eggs is expected to be consumed in Morocco's cities, rather than in the rural areas.

City dwellers are expected to boost their poultry meat consumption from the estimated 1977 level of 4.96 kilograms per person to 8.30 kilograms by 1982, whereas rural residents, whose 1977 per capita consumption is estimated at 1.34 kilograms, are expected to be eating only 1.72 kilograms in 1982.

Egg consumption is expected to follow a similar pattern. Consumption of eggs in cities, which for 1977 is estimated at 35 units per capita, is expected to jump to 50 eggs by 1982, while rural consumption, estimated at 15 eggs per capita for 1977, is projected to nudge ahead only to 18 eggs by 1982.

New poultry houses for broilers to be built during the next 5 years are to cover an area of 3.8 million square meters, while houses for layers are to account for 234,000 square meters in area.

Four slaughter houses, each with a capacity of 3,000 birds per hour, are to be built during the 1977-82 period. □

USSR's Trade Deficit Smaller In April-June

The USSR's hard-currency and overall trade pictures improved considerably in the second quarter of 1977 compared with performances in the first 3 months of the year and the second quarter of 1976.

The Soviet hard-currency trade deficit was reduced by 56 percent—to $780 million—in comparison with the level set in the first 3 months of 1977 (USSR official trade figures. All 1977 ruble values have been converted to U.S. dollars at the average rate of $1.34 per ruble).

Exports to the 75 or so nations with which the Soviets have agreed to settle trade imbalances in hard currency exceeded $3.1 billion, up from the previous quar-

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Government—of their eligible kill to intervention stocks.

Total sales to intervention in the first 6 months of 1977 are estimated at 30,854 metric tons, and total sales to intervention for the year could exceed the 1976 total of 69,663 tons as cattle slaughter increases seasonally in the second half of the year.

Sheep slaughter in 1977 is expected to be nearly 6 percent less than previously forecast, totaling about 1.3 million head—13 percent below the 1976 level. Also, live sheep exports in the first 4 months of 1977 were down to nearly 50 percent of those exported in the comparable period of 1976—a result of fewer lambs than expected.

One reason for the smaller lamb crop is that the decline in sheep numbers is taking place mainly in lowland flocks, which are more productive than mountain flocks, whose numbers remain stagnant.

Sheep slaughter may pick up in the second half of 1977, but the year's total is expected to be substantially below last year's. Sheep exports this year again have been held down by high French tariffs and market closure devices.

Ireland's total grain usage for feed during 1977/78 (July-June) is not expected to increase over the previous year's total because hog and poultry numbers are not increasing, sheep numbers are declining, and growth of the cattle herd remains slow.

Total feedgrain imports during 1977/78 are expected to decline slightly in line with increased Irish production. Feedgrain imports from the United States are expected to decline by one-third in 1977/78 as a result of the recovery of the French corn crop in 1977 and the existence of EC preferences. □

Thai Sugar Output, Exports Still Growing

By Panida Ratanapanachote

Thailand's sugar industry is forging ahead with increased sugarcane production despite weakening world prices for this commodity. Exports of sugar thus far into the year are above those of a year earlier, although value gains were not of equal magnitude. To keep pace with expanding production, Thailand is considering construction of a new terminal to handle the increased volume of exports and to reduce costs.

Unloading sugarcane in Thailand for processing.

Despite weakening sugar prices on the world market, Thailand's sugar industry is pushing ahead with cane and raw sugar production. Thai sugarcane output was up 36 percent to a record 26.0 million metric tons in 1976/77, with raw sugar production estimated at 2.21 million tons (up 38 percent).

Thailand probably will export more than 1.7 million tons of raw sugar in 1977; sugar exports during the first 7 months of 1977 totaled 1,039,310 tons, valued at $205.40 million, compared with 707,548 tons, valued at $209.16 million, during the same period last year.

Customers for Thailand's first 7-month sales of sugar in 1977 included the People's Republic of China (512,751 tons), Japan (414,937 tons), Iran (86,426 tons), Iraq (13,200 tons), Malaysia (10,496 tons), and South Korea (1,500 tons).

The Thailand Sugar Corporation and the Thai Sugar Trading Corporation, two export companies, have already made long-term contracts to ship 640,000 tons of sugar. On August 27, 1976, the Government authorized forward sales of 480,000 tons.

Some 1.12 million tons of Thai raw sugar were sold abroad in 1976, compared with only half this amount 1 year earlier, but lower world prices did not make for a value gain of equal magnitude.

Foreign exchange earnings from sugar sales in 1976 amounted to $336.3 million—up 20 percent over year-earlier levels. The average export price declined 38 percent from $471 per ton

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in 1975 to $291 in 1976. Even so, earnings from foreign sugar sales are now more than 17 times those of only 6 years ago.

Japan was Thailand's largest customer for sugar in 1976, importing some 693,068 tons. Other important markets included Malaysia, the United States, Sri Lanka, and Morocco. The People's Republic of China, South Korea, the United Kingdom, the Netherlands, and Egypt were all new customers for Thai sugar in 1976.

The area planted to sugarcane in 1976/77—498,990 hectares—was more than 30 percent greater than that of 1975/76, and more than three times that of 1971/72. It is, therefore, no surprise that between 1971 and 1976 sugar has risen to be the country's third most important agricultural export (compared with its position as tenth most important in 1971).

In 1976/77, the Thai Government required miils to produce 550,000 tons of white sugar (refined) for domestic consumption, plus 40,000 tons for export. The remaining 1.55 million tons of raw sugar were available for export.

During the first 5 months of 1976, there was a shortage of white sugar for domestic consumption because sugar mills and exporters hoarded supplies, hoping the Government might permit further exports of white sugar.

Actual wholesale and retail prices of white sugar throughout 1976 were higher than Government-controlled prices, which were fixed at $24.63 per 100-kilogram bag (wholesale) and $27.09 per bag (retail).

Moreover, sugar prices in neighboring countries were higher than those in Thailand, which encouraged smuggling, particularly to Malaysia. To remedy the situation, a committee was established to control the production and distribution of white sugar.

Owing to an uncertain pricing policy, approximately 60 percent of Thailand's 42 sugar mills started their crushing operation late in the 1976/77 sugar production year. Crushing normally begins in early November, but for 1976/77, it started in late December.

An agreement finally obtained between cane planters, sugar millers, and the Ministry of Industry specified that mills buy cane for $15 per ton and sell 7 percent of total white sugar production—at least 38,500 tons—to the Ministry of Commerce for resale to low-income groups at 27 cents per kilogram. The Government agreed to raise the controlled wholesale price to 27 cents per kilogram.

In response, the Central Antiprofiteering Committee raised the retail price of white sugar in Bangkok to 30 cents per kilogram and that for refined to 32 cents per kilogram. The Government also agreed to pay a subsidy of $10 per ton on sugar exported at a price below $240 per ton. Approximately 640,000 tons of sugar were subsidized in this manner.

Meanwhile, the business tax on exports of raw sugar was reduced from 7 percent to 1.65 percent in late November 1976. However, no reduction was made for white sugar produced for domestic use.

During the first quarter of 1977, the domestic sugar price declined 5-10 percent below the Government's controlled price. All sugar mills overproduced and sugar flooded the market.

Sugar exporters requested the Government to reduce the 7.7 percent business tax on white sugar to 1.65 percent, as it had done for raw sugar. On March 10, 1977, the Government removed the ban on white sugar exports and agreed—in principle—to exports of up to 40,000 tons. However, no decision has yet been reached on the business tax for white sugar.

Since foreign white sugar sales are growing very quickly, consideration is being given to constructing a terminal to handle sugar exports. In addition to reducing costs, this would facilitate the movement of sugar destined for export. The proposed terminal would have a daily capacity of 10,000 tons and require an investment of $24.6 million. At present, a South African company is reportedly considering investment in this project.

It is anticipated that the Thai sugar industry will remain in fairly good economic condition, although the sugar situation in the world market is in the doldrums. Some Thai sugar industry officials are hopeful that the United States and Canada may require more sugar, following the recent move of their Governments to ban the use of saccharine. □

Thailand: Sugarcane and Raw Sugar, 1971/72-1976/77

Year	Planted area	Cane production	Raw sugar production
	Hectares	Metric tons	Metric tons
1971/72	141,238	5,925,566	501,775
1972/73	183,478	9,512,794	648,438
1973/74	187,989	12,694,492	922,827
1974/75	313,274	13,413,442	1,060,330
1975/76	375,672	19,099,070	1,603,590
1976/77	498,990	26,000,000	2,212,302

Thailand: Raw Sugar Exports, Calendar 1975 and 1976

Country of destination	1975		1976	
	Metric tons	Thous. dol.	Metric tons	Thous. dol.
Japan	318,376	152,978.1	693,068	209,026.4
Malaysia	69,644	31,247.2	110,722	31,217.7
United States	118,643	51,379.9	66,690	21,053.8
PRC	0	0	65,987	20,614.0
Sri Lanka	29,328	11,961.7	34,813	10,629.5
South Korea	0	0	34,974	9,211.5
Morocco	23,901	8,392.6	25,819	8,266.2
Iran	13,239	11,529.8	22,847	6,688.3
Syria	13,259	7,467.7	20,609	5,648.4
Other	8,460	6,164.8	45,494	13,916.4
Total	594,850	281,121.8	1,121,023	336,272.2

Source: Thailand Department of Customs.

Colombia's Coffee Aids Development Programs

Loading coffee for export at a Colombian port. (Colombia Information Service photo.)

Coffee production and exports are not only the source of a significant share of Colombia's income but also finance much of its development program.

Charged with maintaining that country's production and exports at high levels is the 50-year old National Federation of Coffee Growers, to which the Colombian Government has given responsibility for fostering and regulating the country's entire coffee economy.

The Federation also administers most of Colombia's development programs in the coffee regions, according to the Colombia Information Service in New York City.

The Federation's responsibilities include formulating price policies, maintaining quality control of exports, building consumer recognition of Colombian coffee, financing research in many areas such as developing new coffee varieties and improving current ones, and maintaining offices in New York, London, Madrid, Rome, Brussels, Tokyo, and Buenos Aires to monitor coffee sales abroad.

During the past 50 years the Federation—with coffee revenues—has constructed over 2,400 miles of access roads, provided water supplies to 453,000 rural inhabitants—equal to 22 percent of the population—in coffee-growing regions, constructed schools for 324,000 students, and brought electricity to 75,000 farms, 25 percent of all coffee farms. It has also constructed housing for thousands of farmers, health centers, and facilities for coffee processing as well as other agricultural endeavors.

As of 1977, the Federation has assumed responsibility for administration of the National Health Program in the entire coffee-producing zone. Within a short time, it plans to extend basic health services to over 2 million people, working through appropriate Federation and Government health units.

Among the coffee processing facilities built by the Federation in recent years is a freeze-dried coffee plant in Chinchina, constructed in 1973. Current capacity of the plant is 180,000 bags (60 kg each) annually.

Coffee was introduced into Colombia toward the end of the 18th century, and today Colombia has more than 314,158 coffee farms, representing slightly over 25 percent of the total land under cultivation. Thirty percent of the value-added income in the country is generated by the agricultural sector (excluding livestock), and coffee contributes about 8 percent to the gross national product. Coffee production also accounts for 50 percent of foreign exchange earnings, 10 percent of Government revenues, and provides a livelihood, directly or indirectly, for 10 percent of the country's population.

But realizing the dangers inherent in a one-crop economy, the Federation actively promotes diversification through various programs. To cushion the effects of wide price fluctuations on the export market, the Federation is encouraging Colombian farmers in coffee regions to invest more of their resources in supplementary production such as cocoa, sugarcane, bananas, and yucca, along with development in the livestock sector.

One major diversification project, financed by the Federation and several Government agencies, is a $3.3 million sugar works intended to increase employment in an area north of the Cauca Valley. Hitherto devoted to cattle raising, the Valley will grow enough cane to permit the mill to begin operation

by 1978 and to reach 90 percent of production capacity by 1981.

About 700,000 tons of sugarcane ultimately will be produced, yielding some 73,500 tons of refined sugar. About 10,000 jobs are expected to be generated, and surplus sugar production may result in a gain of $3 million in annual export earnings.

A second sugar-producing complex will straddle the Colombia-Venezuela border, and advance the economic integration of the region by establishing a permanent flow of trade between the two countries. The complex represents a $41 million investment. Projected output, upon completion of the plant in 1982, is 93,000 tons of raw sugar, as well as alcohol, molasses, and other by-products. Some 3,500 new jobs are expected to be generated in Colombia, another thousand in Venezuela.

Despite the Federation's efforts toward diversification, it is likely that Colombia's well-being will continue to hinge on the activity of the coffee market for some time to come.

During the first 9 months of the 1976/77 marketing year, Colombia's coffee export earnings rose by 85 percent from the same period a year earlier to US$1.2 billion, even though export volume was off 26.3 percent to 4.4 million bags (60 kg each).

As of early August, coffee earnings in the 9-month period exceeded by 38 percent the $867.6 million earned in all of 1976. And with production rising—from 8.8 million bags in 1976/77 to an estimated 9.3 million in 1977/78—and exports expected to climb by about a million bags to 7.5 million, prospects generally look good.

But there is the nagging problem of consumer resistance to high prices that has caused green coffee values to tumble from a record average of $3.33 per pound (International Coffee Organization composite price based on four major growths) in April 1977 to about $2.30 in September.

Because of concern over the price fall, Colombia met with representatives of other coffee-producing countries at meetings in Brazil, Mexico, Kenya, and Great Britain to devise ways to push prices back to earlier levels and to keep them there.

Colombian coffee exports by destinations for the first 9 months of the current marketing year were: To the United States—Colombia's top market—1.4 million bags (32 percent), a drop of 813,400 bags from the same period a year earlier; to all of Europe, 2.5 million bags (57.2 percent), 25 percent fewer; and to all other markets, 433,200 bags (9.9 percent), a rise of 28.6 percent.

The United States annually absorbs better than 30 percent of Colombia's coffee exports. The Colombian share of the U.S. market has been between 13 and 17 percent each year for the past 4 years.

The world's largest producer of mild coffees and second only to Brazil in volume of production, Colombia, between 1969 and 1976, produced an average of 8.3 million bags annually. Colombia's share of world production for the period was 12.3 percent. Its exportable production amounted to 6.8 million bags, 14 percent of the world total. □

Good Livestock Prices Boost Japanese Meat Output

Japan's meat production is expected to continue to expand during the rest of 1977 and into 1978, owing to generally favorable livestock prices and stable feed costs.

Japanese beef and veal production is estimated to be up some 7 percent in 1977 over year-earlier levels to 320,000 metric tons, carcass weight equivalent (cwe). However, owing to a combination of factors—generally lower retail beef prices and a Government-industry program aimed at stimulating demand—increased beef consumption is expected to more than offset the gain in domestic beef output.

As a result, Japanese beef and veal imports are expected to be up roughly 9 percent in 1977 to 142,000 tons (cwe), compared with 130,000 tons in 1976. Although the U.S. share of Japanese beef and veal imports dropped to 10 percent during the first half of 1977, it is expected to return to the 12-percent share it held in 1976 by the end of the year. (Australia accounts for the balance of imports.)

Livestock inventories indicate that cattle numbers continue to increase, and as of February 1, 1977 (the date of the annual census), Japan had 3.875 million head, compared with 3.723 million a year earlier.

During the first 6 months of 1977, Japan imported 3,194 head of slaughter cattle, compared with 1,170 head during the same period of 1976. Most of the cattle imported were from the United States, and at this time, it is largely a lack of quarantine space that limits Japan's cattle imports. Since a very restrictive quota remains in effect against beef imports, U.S. exports of slaughter cattle to Japan should remain relatively high for the balance of 1977.

Pork production in Japan in 1977 is estimated at more than 1.150 million tons—up 8 percent from the 1.056 million tons produced last year. Pork imports are expected to be down an estimated 26 percent less to 150,000 tons in 1977, owing to the pork import duty, which was waived during much of 1976, but has been in effect since October 31, 1976.

Domestic pork prices were well above the ceiling price in June-August 1977. However, as of September 15, they fell to only 4 percent above the ceiling level.

As of February 1, swine numbers stood at 15.250 head, compared with 14.277 million a year earlier. The August census confirmed this, as it indicated an 8-percent increase in numbers over year-earlier levels.

Japan produces less than 500 tons of mutton and lamb, and as a result imports most of its needs. In 1977, mutton and lamb imports are expected to be up over 6 percent to 290,000 tons (cwe), compared with 272,000 tons during 1976. In the January-May 1977 period, mutton prices were up 5 percent, and since mutton prices are expected to remain strong throughout 1977—and with consumers demanding more processed products—there may be some substitution of pork and beef imports instead of mutton.

Poultry meat production for 1977 is forecast to be up some 5.6 percent to 886,000 tons (product weight basis), while imports are likely to decline 3 percent to 37,000 tons. □

U.S. Flour Mill in Zaire Accelerates Use of U.S. Wheat

By John A. Williams

Growing consumption of bread and similar products has caused Zaire to boost its wheat imports in each of the past 4 years, and in 1977 foreign purchases may hit a new high, with all of the wheat coming from the United States. Impetus for these rises was the establishment in Zaire of a U.S.-controlled flour mill which, this year, is expected to further expand its grinding capacity.

Known as Minoterie de Matadi (MIDEMA), the mill—controlled by the Continental Grain Company of New York—started operation at the Congo River port on a trial basis in April 1973, with plans to become fully operational by July 1 of that year. However, the first phase of the mill's operations saw a number of problems that combined to cut its early productivity.

Among these were the collapse in July 1973 of two of MIDEMA's 12 storage silos and the imposition of stringent security measures, which reduced flour production by 40-50 percent. Sales were affected, too, by world wheat prices, which rose sharply in 1973, forcing the mill to press for a higher ex-mill price for flour.

And at the same time, MIDEMA—although having received assurances it would be the major seller of flour in Zaire—had to market its products in competition with low-quality wheat flour purchased in Germany, the Netherlands, and Italy by importers not connected with MIDEMA.

The flour was sold to bakers, although consumers were dissatisfied with the finished product. This unhappiness caused bakers to buy less flour and resulted in a buildup in stocks. However, with MIDEMA's help, most of this flour was marketed.

In 1974, MIDEMA received new assurances that it would remain Zaire's only authorized flour miller, but with an important addition. Whereas previously flour importers required the approval only of Zaire's Central Bank and the Department of the Economy, they now require the milling firm's written approval to import flour types not milled by MIDEMA before the importers could even approach the Central Bank. It was further decided that, except in certain specified cases, Zaire would import only U.S. Hard winter wheat.

One of the exceptions allowed was that given to the mill in Lubumbashi, which supplies flour only to that town from Zambian or Rhodesian wheat. But its flour production is small compared with that of MIDEMA, grinder of 95-97 percent of the country's wheat.

Although MIDEMA has increased its grindings of wheat over the years to the current 420-430 tons per day, and planned a $6.5-million expansion program in 1977 to boost grinding capacity by one half, the firm faced in 1973 and 1974—and still faces today—a number of problems that mere enlargement will not solve.

From time to time the mill's management has had difficulty obtaining foreign exchange to finance purchases of U.S. wheat, maintenance supplies and spare parts, and to pay the salaries of the 11 expatriates employed at the mill.

And because Matadi—Zaire's sole deep-water harbor—limits entry of ships to those having a maximum draft of about 8 meters, wheat shipments to that country can only be made in relatively small craft, many of which return to the United States empty because of the lack of return cargoes.

With the exception of the non-U.S. flour imported in 1973, most or all of Zaire's flour in recent years has been ground from wheat from the United States. Zairian data show that in U.S. fiscal 1974/75, the United States furnished about half of Zaire's wheat imports, 95 percent in fiscal 1976, and 100 percent in fiscal 1977.

In those years, imports from the United States climbed from 47,000 tons (of a total of 109,000 tons) to 114,000 tons (of a total of 118,000 tons) to all of the 140,000 tons imported in fiscal 1977.

Zaire's capital city, Kinshasa, requires 120,000-130,000 bags (45 kg each) of flour per month. To meet this requirement, MIDEMA normally produces between 210,000-220,000 bags, with the surplus going to the hinterland. On occasion the firm has pushed output to 230,000 bags a month, but this is well beyond the safe limitation imposed by the mill's machinery.

All MIDEMA flour is sold by five distributors selected by the milling firm. These distributors sell according to a quota list, set up by MIDEMA and approved by the Minister of National Economy. This gives the mill an excellent control over the flow of flour in Kinshasa.

The firm believes the flow of flour can be improved inside the country, and has assigned a representative to Kisangani to make recommendations.

To acquaint bakers and others with proper bread-making methods, a U.S. technician went to Zaire in 1975 under sponsorship of the Foreign Agricultural Service and Great Plains Wheat, Inc. A repeat of this activity is planned for this year.

As a result of this market promotion activity and the efforts of MIDEMA, wheat bread is becoming a preferred food item at breakfast and snack time, gradually replacing a popular manoic food known as chikwanga. Behind this growing preference for bread are chikwanga's lack of a distinctive flavor, its unstable market price, and the ease with which it gets stale.

To improve its palatability, chikwanga is usually eaten with fish, meat, and/or vegetables. However, these foods are relatively expensive and must be cooked as needed. By contrast, bread keeps well and its quality is stable—several days' needs can be taken care of at one baking session. Furthermore,

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MIDEMA's quality control laboratory, where the mill's flour is evaluated.

it is reasonably priced and has its own flavor.

Despite bread's growing popularity, manioc is still the No. 1 staple food in the country. A survey of the diets of 1,471 Kinshasan families in 1973 by the University of Zaire indicates that consumption of wheat products ranks second only to manioc. At that time, these Kinshasans consumed 36.12 kilograms of manioc a month, equivalent to 45 percent of the family's food intake, and 10.41 kilograms of bread, equal to 13 percent.

A breakdown of cereal usage by these families indicated that wheat products made up more than 61 percent of total cereal consumption while rice—in the No. 2 spot—comprised just 33 percent. The growth of consumption of wheat flour products is also indicated by MIDEMA production data.

In May-December 1973, the mill ground just 367,014 bags of flour. In 1974, the first full year of production, the firm ground 1.42 million bags, 1.65 million the next year and 2.08 million in 1976. In the first 6 months of 1977, production increased to 1.25 million bags.

And the difficulties hampering manioc production may further speed the swing to wheat flour products. Transportation of manioc to market is often disrupted—something that is seldom allowed to interfere with flour shipments—diseases of the manioc plant are causing some growers to switch to other crops, and sometimes political upheavals of the type that have taken place in Zaire's Bandundu and Bas-Zaire Provinces have reduced output, particularly in these two major producing areas. □

Continued from page 5

USSR Has Smaller Trade Deficit

ter's and year-earlier levels by 42 percent and 15 percent, respectively.

Imports, at $3.9 billion, were down 2 percent from the total for the January-March period and 6 percent below the year-earlier level.

Of the five hard-currency countries accounting for $500 million in imports or more for the first 6 months—including the United States, Japan, Italy, West Germany, and France—Soviet imports declined in comparison with those of the preceding quarter with all but France.

Soviet overall trade with the United States declined 13 percent in the second quarter of 1977 compared with the first-quarter level.

U.S. Census Bureau data indicate that Soviet imports of U.S. farm products—particularly wheat, corn, and soybeans—accounted for 60-65 percent of the import trade and were valued at more than $300 million during April-June 1977.

For overall trade, the Soviets showed a trade surplus of $461 million for the second quarter. The value of both Soviet exports and imports was the highest for the period since the first quarter of 1975—the first period for which data were published.

Exports, at $11.3 billion—were up 19 percent over those in preceding quarter and 21 percent above those in the year-earlier period. □

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U.S. Foods Draw West European Buyers

FAS-sponsored shows of U.S. food products in Amsterdam and Brussels during late September-early October attracted about 800 wholesale-retail-institutional buyers who placed about $500,000 worth of orders at the shows and whose orders during the next 12 months are expected to reach about $3 million.

At the Amsterdam show (above), where 42 U.S. food companies were represented, wild rice samples were offered by Shirley Tretsven, of Minnissippi Products and other companies, to visitors at the trade-only show. At the Paul Masson exhibit (right), Michel Tesseron and Robert Roose were on hand to serve samples and answer questions about the company's wines. □

USSR Lowers Grain Production Estimate

On November 2, Chairman Brezhnev announced at the Revolution Anniversary meeting in Moscow that Soviet grain production this year is expected to be 194 million tons, the fourth largest Soviet grain crop on record. (The Plan for grain called for 213 million tons.)

The USDA Task Force estimates that the breakdown will be 90 million tons of wheat, 90 million tons of coarse grains, and 14 million tons of miscellaneous grains and pulses. This is a substantial reduction from USDA's latest estimate of Soviet production, which was 215 million tons.

USDA now estimates that Soviet grain import requirements from all sources will be in the range of 20-25 million metric tons during October-September 1977/78 period.

Chairman Brezhnev at the same time announced meat production this year will amount to nearly 15 million tons—the Plan called for 14.5 million tons. He also stated the cotton crop will be a record 8.4 million tons. □